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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,493	06/19/2001	Vincent Bryan	46739/252170	5642
27683	7590	12/14/2004	EXAMINER	
HAYNES AND BOONE, LLP 901 MAIN STREET, SUITE 3100 DALLAS, TX 75202			STEWART, ALVIN J	
			ART UNIT	PAPER NUMBER
			3738	

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

es

Office Action Summary	Application No.	Applicant(s)	
	09/744,493	BRYAN ET AL.	
	Examiner	Art Unit	
	Alvin J Stewart	3738	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16 & 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Lines 3-5 are not clear.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The applied reference has common inventors with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

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Claims 1, 2, 4, 7-10, 12, 13, and 16-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Bryan et al US Patent 5,674,296.

Bryan et al discloses a spinal disc implant comprising a cylindrical housing (42 & 44, the plates have cylindrical shape), the housing includes an upper half (42) and a lower half (44) and a plurality of resilient viscoelastic discs (20 & 22) interposed between the housing.

Regarding claim 2, the Examiner interpreted the claims as following: Figure 6 discloses two ovoid discs (one on top of the other) interposed between an upper half (located below vertebrae 372) and lower half (located above vertebrae 374).

Regarding claim 4, see element structures 102 and 104.

Regarding claim 20, see Fig.4, element structure 110.

Regarding claim 21, see Fig. 4.

NOTE: the word “viscoelastic” does not need to be made of hydrogel. See attachment to see the meaning of the word “viscoelastic”.

Claims 1 and 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Navas US Patent 5,375,823.

Navas discloses an implant (see Fig. 4) comprising a cylindrical housing (1), the housing includes an upper half (7) and a lower half (10) and a plurality of resilient viscoelastic discs (4 & 6) interposed between the housing.

Regarding claim 3, the internal cavity is concave and has at least one post (30) extending from the concave surface into a central portion of the disc.

Claims 1, 4-6, 8, 10, 11, 13, and 15-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Mehdizadeh US Patent 5,928,284.

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Mehdizadeh discloses a spinal disc implant (10) comprising a cylindrical housing (11 & 12), the housing includes an upper half (11) and a lower half (12) and a plurality of resilient viscoelastic discs (13 & filling disclosed in col. 2, lines 51-57) interposed between the housing.

Claims 11, 12, 16, 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Rogozinski US Patent 5,888,226.

Rogozinski discloses a spinal disc implant comprising a cylindrical housing the housing includes an upper half (20) and a lower half (20) and a plurality of resilient viscoelastic discs (10) interposed between the housing.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin J Stewart whose telephone number is 703-305-0277. The examiner can normally be reached on Monday-Friday 7:00AM-5:30PM(1 Friday B-week off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on 703-308-2111. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Alvin J Stewart

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Primary Examiner
Art Unit 3738

December 10, 2004.

WATER

combustible materials (e.g. glass beads in a metal matrix) and synthetic materials. See *Synthetic*.

anthracite (Zool.), An oxygen-rich mineral that is found in coal.

anthracol (Chem.), Substantive acid. Also oil of anthracol (*M.M.*). See *black-green-white-phenolic structure (Zool.)*.

anthracol (Zool.), The characteristic structure of volcanic ashes which have been produced by the disruption of highly vesicular siliceous rocks, most of the component fragments thus having concave outlines.

anthracite (Min.), Hydrated iron phosphate ($\text{Fe}_3\text{P}_2\text{O}_8 \cdot 8\text{H}_2\text{O}$). Monoclinic.

anthracite (Zool.), Giving birth to living young which have already reached an advanced stage of development; of organisms, *in vitro*.

anthracite (Bot.), (1) The production of bubble or small plants in place of flowers, as in e.g. *Ranunculus repens*. (2) The premature germination of seeds or spores before they are sired from the parent plant as in many mangrove trees.

anthracite (Aeron.), Very Low Baseline Interferometry, a technique of aperture synthesis used in radio astronomy to compensate for the loss of high spatial frequencies.

anthracite (Telecomm.), Abbrev. for *Very Low Frequency*.

anthracite (Comp.), Very large scale integration refers to a chip with 100,000 or more logic gates.

anthracite (Aeron.), Abbrev. for *Very Large Scale Integration*, referring to integrated circuits where a component density of the order of 100,000 devices is achieved on a single chip.

anthracite (Phys.), See *separate liquid-solid mechanism*.

anvil (Aeron.), Abbrev. for *Visual Meteorological Condition*.

anvil (Comp.), TN for an IBM operating system.

anvil (Comp.), The ICL proprietary operating system.

anvil (Comp.), A MOS technology in which four diffused layers are formed in silicon and V-shaped grooves are precisely etched in the layers. Metal is then deposited over silicon dioxide (an insulator) to form gate and other electrodes. Higher carrier densities can be used than with other MOS techniques and a higher density of components per chip achieved.

anvil (Comp.), TN for a DEC operating system for its VAX range of computers.

anvil (Aeron.), See *flight envelope*.

anvil (Aeron.), In air-breathing engines, folds of the lining membrane of the anvil by the vibration of the edges of which, under the influence of the breath, the voice is produced.

anvil (Zool.), In many male Frogs, loose folds of skin at each angle of the mouth which can be inflated from within the mouth into a globular form, and act as resonators.

anvil (Aeron.), Voice code. System for synthetic speech using recorded speech elements.

anvil (Telecomm.), For *Voice Operated Device*.

anvil (Sung.), Abbrev. for the suppression of echoes in transoceanic radio telemetry.

anvil (Aeron.), Voice operation demonstrator. System for recording synthetic speech through keyboard control of electronic oscillators.

anvil (Telecomm.), Abbrev. for *Voice Operated Gateway Device*. Used in telephone systems to give an approximately constant volume output for a wide range of input signals.

anvil (Min.), A home-made lampshade, the otherwise recognizable constituent being orthoclase. Cf. *apophyllite*.

anvil (Aeron.), The coil attached to the cone of a loudspeaker. The coil currents react with the magnet's field to drive the cone. Also used in microphones to generate the signal.

anvil (Aeron.), In speech, an elemental sound in which the component frequencies are exact multiples of a fundamental frequency which is determined by the tension of the oscillating muscles in the larynx.

anvil (Aeron.), Device which deliberately distorts speech for specific purpose, e.g. telephonic imitation.